NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

LAND SMOOTHING

(Acre) Code 466

DEFINITION

Removing irregularities on the land surface by use of special equipment.

PURPOSE

This practice may be applied as part of a resource management system to support one or more of the following purposes.

- Improve surface drainage,
- Provide for more effective use of precipitation.
- Obtain more uniform planting depths,
- Provide for more uniform cultivation.
- Improve equipment operation and efficiency,
- Improve terrace alignment and/or,
- Facilitate contour cultivation.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies on areas where depressions, mounds, old terraces, turn rows, and other surface irregularities interfere with the application of needed soil and water conservation and management practices.

This practice applies to operations classed as rough grading. Ordinarily, this does not require a complete grid survey. It does not apply to the "floating" performed as a regular maintenance practice on irrigated land or the "planning" performed described in NRCS conservation practice standard, Precision Land Forming, Code 462 or in Irrigation Land Leveling, Code 464.

This practice is limited to areas having adequate soil depth or where topsoil can be salvaged and replaced.

CRITERIA

The extent of rough grading required and tolerances of the finished smoothing job shall be in keeping with the requirements of the planned cropping system.

CONSIDERATIONS

In planning this practice, consider the effects on the water budget, especially on volumes and rates of runoff, infiltration, and evaporation.

Potential for changes in plant growth and transpiration because of changes in the volume of soil water.

Consider effects on erosion and the movement of sediment and soluble and sediment-attached substances carried by runoff.

Consider potential for earth moving to uncover or redistribute toxic materials, such as saline soils.

Effects on the use and management of nutrients and pesticides.

PLANS AND SPECIFICATIONS

Plans and specifications for land smoothing shall be in keeping with this standard and shall describe the requirements for applying the practice to achieve its intended purpose.

Plans and specifications for shall identify the area where the practice will be applied. Irregularities shall be smoothed to the degree required for the planned use and the requirements of subsequent tillage, floating, or planing to be performed. The land to be smoothed shall be cleared of vegetative matter and trash. Where possible, the ground surface should be plowed or disked prior to smoothing.

OPERATION AND MAINTAINENCE

This practice does not require operation and maintenance.

Conservation practice standards are reviewed periodically and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.